Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GAYLE MARIE FRANKENBACH,
ELLEN SCHMIDT BAKER, REBECCA GAYL BAKER,
MARC JOHAN DECLERCQ, HUGO JEAN MARIE DEMEYERE,
RYAN MATTHEW HEIDEN, CHARLES ALBERT HENSLEY,
BRENT ALAN KOLB, RUTH ANNE MURPHY,
RONALD EDWARD PEGOLI, TOAN TRINH,
ERROL HOFFMAN WAHL, MICHAEL R. WEAVER,
DEAN LARRY DUVAL, JOHN HENRY SHAW, JR.,
MASAE NOGAMI and RONGHUI WU

Appeal No. 2003-0777
Application No. 09/554,969

ON BRIEF

Before KIMLIN, WARREN and JEFFREY T. SMITH, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 12-21, 23 and 25-39. The final rejection of claims 22 and 24

has been withdrawn by the examiner. Claims 22 and 24 are objected to as being dependent upon a rejected claim (see page 3 of answer).

A copy of illustrative claim 1 is appended to this decision.

The examiner relies upon the following reference as evidence of obviousness:

Trinh et al. (WO '169) WO 97/03169 Jan. 30, 1997

Appellants' claimed invention is directed to a clear, or translucent, liquid fabric softener composition comprising, inter alia, a principal solvent having a ClogP within the claimed range, and an electrolyte in an amount of from about 0.5% to about 10% by weight. According to appellants, "[t]he utilization of relatively high levels of electrolyte allows the utilization of a relatively broad range of principal solvents to provide a clear or translucent composition" (page 2 of brief, third paragraph).

Appealed claims 1, 12-21, 23 and 25-39 stand rejected under 35 U.S.C. § 103 as being unpatentable over WO '169.

Appellants submit at page 2 of the brief that "[c]laims 1 and 15-39 stand or fall together." Accordingly, with the exception of claims 12, 13 and 14, for which appellants provide

separate arguments, all the appealed claims stand or fall together with claim 1.

We have thoroughly reviewed each of appellants' arguments for patentability. We are in complete agreement with the examiner, however, that the claimed subject matter would have been obvious to one of ordinary skill in the art within the meaning of § 103 in view of the applied prior art. Accordingly, we will sustain the examiner's rejection for essentially those reasons expressed in the answer.

There is no dispute that WO '169, like appellants, discloses a clear, liquid fabric softener composition comprising a principal solvent having a ClogP of about 0.15 to about 0.64, which range falls directly within the claimed range. Appellants also do not dispute that the reference discloses that the fabric softener composition may also comprise up to about 2% electrolytes, which range overlaps the claimed range of about 0.5 % to about 10% by weight. In essence, it is appellants' contention that the reference does not disclose the claimed ranges for a principal solvent and electrolyte. Appellants point out that the

highest level of electrolyte exemplified in the reference is 0.25%.

Appellants' arguments are unavailing since it is well settled that it is a matter of prima facie obviousness when a claimed range encompasses or overlaps a prior art range. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. (1990); In re Wertheim, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976); In re Malagari, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974). Also, when, as here, the prior art discloses values that fall directly within a claimed range, there is an anticipation of the claimed range. As for appellants' argument that WO '169 discloses that the presence of electrolyte is optional, and that the reference teaches a more preferable and exemplified amount of electrolyte that is below the claimed lower limit, the examiner has properly explained that all the teachings of a reference must be considered in determining obvious under § 103, and such consideration is not limited to the preferred embodiments of the reference. In re Lamberti, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976).

Also, contrary to appellants' argument, it is not necessary for a finding of obviousness that WO '169 teaches that higher concentrations of electrolyte enable the use of a broader range of solvents in formulating a clear or translucent fabric softener composition. In our view, it is sufficient for a finding of prima facie obviousness that WO '169 teaches a class of clear liquid fabric softener compositions which fall within the scope of the appealed claims.

Regarding separately argued claims 12 and 13, the referenced ranges for ClogP and amount of electrolyte overlap the claimed ranges, and the reference teaches values that fall directly within the claimed ranges.

As a final point, we note that appellants base no argument upon objective evidence of nonbviousness, such as unexpected results.

In conclusion, based on the foregoing, the examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

EDWARD C. KIMLIN Administrative Patent Judge	)	
CHARLES F. WARREN Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JEFFREY T. SMITH Administrative Patent Judge	)	

eck/vsh

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Appendix
Claim 1

1. Clear, or translucent liquid fabric softener composition comprising:

A. from about 2% to about 80% by weight of the composition of fabric softener;

B. at least an effective level of principal solvent having a ClogP of from about -2.0 to about 2.6 to provide a clear or translucent composition;

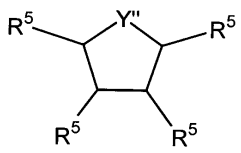
C. from about 0.5 % to about 10% by weight of the composition of electrolyte;

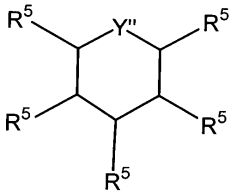
D. optionally, from 0% to about 15% by weight of the composition of phase stabilizer selected from the group consisting of:

1. nonionic surfactants derived from saturated and/or unsaturated primary, secondary, and/or branched, amine, amide, amine-oxide, fatty alcohol, fatty acid, alkyl phenol, and/or alkyl aryl carboxylic acid compounds having from about 6 to about 22 carbon atoms in a hydrophobic chain, wherein at least one active hydrogen of said compounds is ethoxylated with $\leq$ 50 ethylene oxide moieties to provide an HLB of from about 8 to about 20;

2. nonionic surfactants with bulky head groups selected from:

a. surfactants having the formulas:





wherein Y″ = N or O; and each R^5 is selected independently from the following: -H,-OH, $-(CH_2)xCH_3$, $-O(OR^2)_z-H$, $-OR^1$, - $OC(O)R^1$, and $-CH(CH_2-(OR^2)_{z''}-H)-CH_2-(OR^2)_{z'}-C(O)R^1$, wherein R^1 is selected from the group consisting of saturated or unsaturated, primary, secondary or branched chain alkyl or alkyl-aryl hydrocarbons; said hydrocarbon chain having a length of from about 6 to about 22, wherein each R^2 is selected from the following groups or combinations of the following groups: $-(CH2)_{n-}$ and/or $-[CH(CH_3)CH_2]-$ wherein n is from I to 4; and wherein x is from 0 to about 3, and z, z′, and z″ are from about 5 about 20;

b. polyhydroxy fatty acid amide surfactants of the formula:

$$R^2-C(O)-N(R^1)-Z$$

wherein: each R^1 is H, C_1 -C_4 hydrocarbyl, C_1 -C_4 alkoxyalkyl, or hydroxyalkyl; R^2 is a C_5-C_{21} hydrocarbyl moiety; and each Z is a polyhydroxyhydrocarbyl moiety having a linear hydrocarbyl chain with at least 3 hydroxyls directly connected to the chain, or an ethoxylated derivative thereof;

c. surfactants having the formula

$$R^1\text{-}C(O)\text{-}Y'\text{-}[CR^5)]_m\text{-}CH_2O(R^2O)_zH$$

wherein R^1 is selected from the group consisting of saturated or unsaturated, primary, secondary or branched chain alkyl or alkyl-aryl hydrocarbons; said hydrocarbon chain having a length of from about 6 to about 22; Y' is selected from the following groups: -O-; -N(A)-; and mixtures thereof-, and A is selected from the following groups: H; R^1; $-(R^2\text{-}O)_z\text{-}H$; $-(CH_2)xCH_3$; phenyl, or substituted aryl, wherein x is from 0 to about 3 and total z is from about 5 to about 30; each R^2 is selected from the following groups or combinations of the following groups: $-(CH2)_n-$ wherein n is from about 1 to about 4 and/or $-[CH(CH_3)CH_2]-$; each R^5 is selected from the following groups: -OH; and $-O(R^2O)_z\text{-}H$; and m is from about 2 to about 4; and

d. mixtures thereof;

3. surfactant complexes formed by one surfactant ion being neutralized with surfactant ion of opposite charge or an electrolyte ion that is suitable for reducing dilution viscosity;

4. block copolymer surfactants comprising polyethylene oxide moieties and propylene oxide moieties;

5. cationic surfactants having the formula:

$$\{R^1 m\ -(R^2\text{-}O)_z\text{-}H]_p\}^+ X-$$

wherein R^1 is selected from the group consisting of saturated or unsaturated, primary, secondary or branched chain alkyl or alkyl-aryl hydrocarbons; said hydrocarbon chain having from about 6 to about 22 carbon atoms; each R^2 is selected from

the following groups or combinations of the following groups: $-(CH_2)_n-$ and/or $-[CH(CH_3)CH_2]-$;Y is selected from the following groups: $= N^+-(A)_q$; $-(CH_2)_n-N^+-(A)_q$;$-B-(CH_2)_n-N^+-(A)_2$; -(phenyl)-N+-(A)q; $-(B\text{-phenyl})-N^+-(A)_q$; with n being from about 1 to about 4, wherein each A is independently selected from the following groups: H; C_{1-5} alkyl; R^1; $-(R^2O)_z-$ H; $-(CH_2)_xCH_3$; phenyl, and substituted aryl; where x is from 0 to about 3; and each B is selected from the following groups: -O-; -NA-; $-NA_2$; -C(O)O-; and -C(O)N(A)-; wherein R^2 is defined as hereinbefore; q = 1 or 2; m + p + q = 4; total z per molecule is from about 3 to about 50; and X^- is an anion which is compatible with fabric softener actives and adjunct ingredients; and

6. mixtures thereof,

E. optionally, from 0 to about 15% perfume; and

F. the balance water

wherein said electrolyte and said phase stabilizer, when present, provide at least one improvement selected from: lower dilution viscosity; the same, or better, stability with less principal solvent; and/or the use of principal solvents with a ClogP outside the range of from about 0.15 to about 0.64.